

# **MARUI ZET System**

## **3D Printed Project Technical Document**

(v1.3)

By Vietnam Airsoft

## 注意事项

The project started in November 2021, The goal is to complete the mapping of specific commercially available Airsoft gun products, and through 3D printing technology (or other means), complete as possible to reproduce its structure and function, so as to achieve the continuation of Airsoft guns and Wargames.

The documentation provides only minimal technical guidance while listing all the standard parts required for the model (Assuming you have a complete understanding of the structure and assembly process of the Marui ZET system)

However, it should be noted that this CAD file is only recommended for research and development rather than 3D printing, In order to avoid possible resources wast、legal risks, **Please don't do this.**

Commercial use of this project is permitted, as long as it does not violate local laws. **(The original file of this project is not suitable for mass production)**

<https://grabcad.com/vietnam.airsoft-1/models>



## Update history

### **v1.0**

-Original version

### **v1.1**

-File format fix

### **v1.2**

(---)

### **v1.3**

-EN ver Technical document (+)

-Stock Update (+)

-Pistol grip Update (+)

-Stock compatibility Update

-Lower update, magazine compatibility optimization

-Nozzle guide optimization

-Dust cover update (+)

-Optional trigger guard (+)

-Optional QBZ191 muzzle device (+)

(Update may appear new part specifications, this list will not  
continue to follow up)

## Description

The CAD file can divided into four parts: main file、trigger box、 bolt assembly 、 receiver set.

Except for the upper and lower, all the other parts are basically consistent with the original Airsoft gun sample, which can be interchangeable. The upper thread is AEG spec, and the Hop-up system uses Marui glock series bucking and inner barrel.

For 3D printing, PLA, PETG, ABS, TPU and other basic materials can theoretically meet the minimum requirements, but considering many factors, some parts may require higher strength materials. (Bolt carrier、Nozzle、Nozzle guide)

And...these parts are real spec:

Takedown pin

Pivot pin

Trigger guard

stock

Pistol grip

Forward assist

## Trigger Box Assembly

### Pin

| Spec      | Not i ce                                  |
|-----------|-------------------------------------------|
| M4X14mm   |                                           |
| M4X17mm   | Abnormal spec,can be processed or printed |
| M4X22mm   |                                           |
| M1.5X10mm |                                           |

### Spring

| Spec                              | Not i ce                                                                         |
|-----------------------------------|----------------------------------------------------------------------------------|
| 0.9 (or 1.0) X11mm Torsion spring | Right-wind 2~3turns 240° Hammer spring                                           |
| 0.5X3.5mm Torsion spring          | Left-wind 2~5turns 90° Valve knock return spring                                 |
| 0.5X3X10mm Compression spring (1) | Sear spring                                                                      |
| 0.5X3X10mm Compression spring (2) | Full auto sear spring                                                            |
| 0.5X3X15mm Compression spring     | Trigger return spring                                                            |
| 0.5X3X10mm Compression spring (3) | Disconnect spring                                                                |
| 0.3X3X35mm Compression spring     | Bolt stop/Z plate buffer spring, The original spec is 0.6X4X30mm (not recommend) |
| 0.3X2.5X10mm Compression spring   | Selector detent spring                                                           |
| 0.3X4X10mm Compression spring     | Bolt lock reset spring                                                           |
| 0.5X7X25mm Compression spring     | Magazine release spring                                                          |

### Screw

| Spec    | Not i ce            |
|---------|---------------------|
| M3X8mm  | Cup head hex screws |
| M3X10mm | Cup head hex screws |
| M3X12mm | Cup head hex screws |

### Special parts

| Spec                                            | Not i ce                   |
|-------------------------------------------------|----------------------------|
| 4X6X12mm (Inside X outside X high) Shaft sleeve | Trigger pivot pin          |
| 0.5~0.8X4mm C clips/spring                      | For retain the trigger pin |
| 4X10X4mm (Inside X outside X high) Bearing      | MR104zz Hammer roller      |

## Bolt Assembly

### Pin

| Spec    | Not ice               |
|---------|-----------------------|
| M3X10mm | Rear end roller shaft |

### Spring

| Spec                              | Not ice              |
|-----------------------------------|----------------------|
| 0.5X4X30mm Tension spring         | Nozzle return spring |
| 0.6X4X15mm Compression spring     | Nozzle Buffer spring |
| 0.3X2.5X20mm Compression spring   | Nozzle Buffer spring |
| 0.3~0.5X7X12mm Compression spring | Nozzle valve spring  |

### Screw

| Spec                             | Not ice                          |
|----------------------------------|----------------------------------|
| M3X4mm (1)                       | Round head hex screws            |
| M3X4mm (2)                       | Round head hex screws            |
| M2X16mm                          | Round head hex screws            |
| M2X8mm Hollow head set screw (1) | For fix the Nozzle return spring |
| M2X8mm Hollow head set screw (2) | For fix the Nozzle return spring |
| M2X8mm Hollow head set screw (3) | For retain the roller shaft      |
| M5X20mm                          | Cup head hex screws              |

### Special parts

| Spec                                      | Not ice                |
|-------------------------------------------|------------------------|
| 1.5X9mm O-ring                            | Rear end seal          |
| 3X19mm (or 18.5mm) O-ring                 | For Nozzle             |
| 3X9X4mm (Inside X outside X high) Bearing | MR93zz Rear end roller |
| M5 Nut                                    |                        |

## Receiver&Others

### Pin

| Spec                    | Not i ce                |
|-------------------------|-------------------------|
| M2.3X8mm Round head (1) | For takedown pin detent |
| M2.3X8mmound head (2)   | For pivot pin detent    |
| M1.5X6mm Roll pin       | For charging handle     |
| M2.3X8mmound head (3)   | For forward assist      |

### Spr ing

| Spec                              | Not i ce                |
|-----------------------------------|-------------------------|
| 1X20X300mm Compression spring     | Buffer spring           |
| 0.1X10X70mm Compression spring    | Hydraulic buffer plan A |
| 0.3X3X20mm Compression spring     | Buffer retainer spring  |
| 0.3X2X25mm Compression spring (1) | Detent spring           |
| 0.3X2X25mm Compression spring (2) | Detent spring           |
| 0.5X4X15mm Compression spring     | For charging handle     |
| 0.5X8X25mm Compression spring     | For forward assist      |
| 0.3X2X10mm Compression spring     | For forward assist      |

### Screw

| Spec                                           | Not i ce                            |
|------------------------------------------------|-------------------------------------|
| M3X16mm Hollow head set screw                  | For Buffer                          |
| M3X16mm Hollow head set screw                  | For restrict Buffer retainer        |
| M2.5X12mm Hollow head set screw                | For forward assist                  |
| M2X6mm Hollow head set screw                   | For forward assist                  |
| M5X25mm                                        | Cup head hex screws For pistol grip |
| M3X5mm Hollow head set screw (Optional)<br>(1) | For Gas system                      |
| M3X5mm Hollow head set screw (Optional)<br>(2) | For Gas system                      |
| M3X5mm Hollow head set screw (Optional)<br>(3) | For handguard                       |
| M3X5mm Hollow head set screw (Optional)<br>(4) | For handguard                       |
| M2X8mm Hollow head set screw (Optional)        | For Gas system                      |

|                                          |                                             |
|------------------------------------------|---------------------------------------------|
| M2.5X10mm                                | Cup head hex screws for fix the trigger box |
| M4X16mm Hollow head set screw (Optional) | Optional for trigger guard                  |
|                                          |                                             |

### Special parts

| Spec                                               | Not ice                 |
|----------------------------------------------------|-------------------------|
| 12X16mm (Diameter X height) Cylindrical magnet (1) | Hydraulic buffer plan B |
| 12X16mm (Diameter X height) Cylindrical magnet (2) | Hydraulic buffer plan B |
| M5X8X3mm Square nut                                | For pistol grip         |

## Hop-up System

### Pin

| Spec | Not ice |
|------|---------|
| Non  |         |

### Spring

| Spec                         | Not ice    |
|------------------------------|------------|
| 0.3X2X4mm Compression spring | For detent |

### Screw

| Spec      | Not ice             |
|-----------|---------------------|
| M2.5X10mm | Cup head hex screws |

### Special parts

| Spec                                     | Not ice    |
|------------------------------------------|------------|
| 2X6mm O-ring                             | For Buffer |
| 2.5X2.5mm round head (pin or steel ball) | detent     |

(There may be errors in the document. If errors occur, use your own initiative)

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